

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JAMES A. SIMMONS, JR.,
and JOSEPH J. HARDING

Appeal No. 1999-2132
Application 08/672,856

HEARD: MAY 3, 2000

Before McCANDLISH, Senior Administrative Patent Judge, and
STAAB and GONZALES, Administrative Patent Judges.

GONZALES, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the examiner's final rejection of claims 1 through 13, 20 and 21. Claims 14 through 19 have been canceled.

We REVERSE.

The subject matter on appeal is directed to a system for transferring a cushioning pad from a cushioning conversion machine (claims 1-8), to a cushioning conversion machine including a cushioning product transferring system (claims 9-13 and 20) and to the combination of a table and a cushioning conversion machine including a cushioning product transferring system (claim 21). A copy of the appealed claims is reproduced in an "Appendix" attached to the main brief.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Reichental et al. (Reichental)	5,297,919	Mar. 29, 1994
Tekavec et al. (Tekavec)	5,487,717 (filed Nov. 23, 1993)	Jan. 30, 1996
Mistyurik et al. ¹ (Mistyurik)(France)	2,624,830	Jun. 23, 1989

Claims 1 through 13, 20 and 21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Tekavec in view of Mistyurik.

¹ In determining the teachings of Mistyurik, we will rely on the translation provided by the PTO. A copy of the translation is attached for the appellants' convenience.

Claims 1, 2, 5 through 10, 12, 13, 20 and 21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Tekavec in view of Reichental.²

The full text of the examiner's rejections and the response to the arguments presented by appellants appear in the answer (Paper No. 17, mailed October 22, 1998), while the complete statement of appellants' arguments can be found in the main brief (Paper No. 16, filed September 21, 1998) and the reply brief (Paper No. 18, filed December 28, 1998).

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we conclude that the rejections cannot be sustained.

² The amendment filed on Sep. 21, 1998, canceling claims 14-19, has been entered. Thus, the statement in the answer (page 4) that claims 1, 2, 5-10 and 12-21 stand rejected 35 U.S.C. § 103(a) over Tekavec in view of Reichental is a typographical error.

The test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art. See In re Young, 927 F.2d 588, 591, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991) and In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981).

Turning first to the examiner's rejection of claims 1 through 13, 20 and 21 under 35 U.S.C. § 103(a) as being unpatentable over Tekavec in view of Mistyurik, we note that claim 1 calls for a system for transferring a pad from a cushioning conversion machine comprising upper and lower series of drive elements, each series arranged in a generally arcuate path and spaced to accommodate a pad, and a motor for powering the rotation of the drive elements.

Claim 9 sets forth a cushioning conversion machine located below a work table comprising a stock supply assembly, a conversion assembly, and a cushioning product transferring system including an upper and lower series of roller defining a path therebetween leading from the machine exit portion to a

passage in the work table and a motor for powering the rotation of the rollers.

Claim 20 defines a cushioning conversion machine comprising a conversion assembly, a severing assembly, a pad transferring system downstream of the severing assembly having an upper and lower series of drive elements spaced to accommodate a pad and effect transfer thereof along a generally arcuate path, and a motor for powering rotation of the drive elements.

Claim 21 recites the combination of a cushioning conversion machine and a table, the cushioning conversion machine having a conversion assembly, a severing assembly downstream of the conversion assembly and a pad-transferring system downstream of the severing assembly, and the table having a horizontal work platform and an opening therethrough, the cushioning conversion machine being located below the work platform and the pad-transferring system comprising an upper and lower series of drive rollers defining a predetermined path leading from the severing assembly to the opening in the work platform and a motor for powering the rotation of the

rollers.

Tekavec discloses a cushioning conversion machine 12 and a table 10 having a horizontal work platform 14 and an opening 18 therethrough. The cushioning conversion machine 12 comprises a conversion assembly including a stock supply assembly 50, a forming assembly 52, a gear assembly 54, a cutting assembly 56, and a post-cutting constraining assembly 58 (col. 5, ll. 49-54). The gear assembly 54 pulls stock material 22 through the machine and also coins a central band of the continuous strip to form a coined strip (id. at 60-63). The cutting assembly 56 cuts the coined strip into cut sections, or pads, P (id. at 63-65). These cut sections then travel through the post-cutting constraining assembly 58 (id. at 65-66). The post-cutting constraining assembly 58 has an exit opening 62 which may be aligned with the table opening 18 (col. 6, ll. 14-17 and 21-25).

Mistyurik discloses a label stacking device 10 and a stacking process designed to receive labels coming from a label dispensing device, e.g., a printer 11, and to orient the

labels vertically in a stack (page 2). The label stacking device 10 includes a label-input conveyer 14 including rollers 22 mounted on shafts 20 (Figures 2 and 4) and driven by electric motor 31 via gear train 30 (page 5) and rollers 42 mounted on shafts 41, which are not driven (page 6). Rollers 42 are preferably flexible in order to guarantee that driven rollers 22 are correctly pressed (id.). Mistyurik also teaches that the flexibility of rollers 42 improves the advancement of labels of different thicknesses (id.).

The examiner describes (answer, page 3) Tekavec as showing

a stock supply assembly (50), a conversion assembly and upper and lower drive rollers (54), arranged as a conveyor, for transferring cut products through an arcuate path leading from a machine exit to a passage in the work table. Thus, Tekavec teaches the invention substantially as claimed except for duplicating the Tekavec upper and lower drive rollers such that the upper and lower drive rollers are arranged in series along the Tekavec arcuate path.

The examiner also describes (answer, pages 3-4) Mistyurik as teaching that

utilizing complementary upper and lower series of drive rollers about an arcuate path extending from a first lower position to a second upper position improves the reliability of a work piece conveying device by ensuring that work pieces are transferred by friction along the

arcuate path and, thus, was old and well known at the time of the invention.

The examiner then concludes (answer, page 4) that it would have been obvious to duplicate the Tekavec upper and lower drive rollers and provide for an upper and a lower series of drive rollers along the Tekavec arcuate discharge path, in order to improve the reliability of the Tekavec transfer device (1) in view of Mistyurik's teachings and (2) since it has been held that mere duplication of essential working parts involves only routine skill in the art.

The "drive rollers" referred to by the examiner are actually described by Tekavec as gear assembly 54. As indicated supra, the gear assembly 54 performs two disclosed functions, namely, it pulls the stock material 22 through the machine and it deforms or coins the stock to form the cushioning pad. Like appellants (brief, page 10), we know of no reason why one of ordinary skill in the art would have disposed additional coining gears along the arcuate path defined by the post-cutting constraining assembly 58, after the pad has been completely formed and severed into a desired length, absent the teachings in appellants' specification.

While Mistyurik does teach a series of upper and lower rollers³ disposed about an arcuate path for conveying labels from a printer to a stacker device, we know of no reason why one of ordinary skill in the art would have combined the label-input conveyer 14 with a cushioning conversion machine or rearranged the spacing between the upper rollers 42 and the

³ We have some difficulty describing the rollers 42 of Mistyurik as "drive elements" (e.g., claim 1), since Mistyurik specifically teaches that rollers 42 are not powered for rotation by motor 31. Instead, rollers 42 are rotated by frictional engagement with driven rollers 22 and 27.

lower rollers 22 and 27 so as to accommodate a cushioning pad therebetween. Further, we have carefully considered the complete disclosure contained in the Mistyurik reference, but are unable to discern any teaching or suggestion from Mistyurik that the reliability of a work piece conveying device can be improved by transferring the work pieces by friction.

It is well settled that the teachings of the prior art taken as a whole which must provide the motivation or suggestion to combine the references. See Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988) and Interconnect Planning Corp. v. Feil, 774 F.2d 1132, 1143, 227 USPQ 543, 550-51 (Fed. Cir. 1985). The only suggestion for combining the diverse systems of the references in the manner proposed by the examiner stems from hindsight knowledge derived solely from the appellants' disclosure. The use of hindsight knowledge to support a conclusion of obviousness is, of course, impermissible. Therefore, we will not sustain the standing 35 U.S.C. § 103 rejection of claims 1 through 13, 20

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and 21 based on Tekavec in view of Mistyurik.

Next, we will consider the standing 35 U.S.C. § 103 rejection of claims 1, 2, 5 through 10, 12, 13, 20 and 21 based on Tekavec in view of Reichental. Reichental, like appellants, discloses a machine for fabricating cushioning dunnage material for use in packaging from a continuous roll of web material. However, Reichental fails to teach or suggest any cushioning product transferring system located between the machine exit or severing assembly and a work table opening. Instead, the reference teaches that after the dunnage material D is cut by severing means 30, the driven exit rollers 31 (see Figure 2) convey the remaining portion of the cut segment away from the machine (col. 6, l. 67-col. 7, l. 2).

The examiner describes Reichental as disclosing a "work piece conveying device" (answer, page 5) and that the reference teaches that utilizing an "upper series and a lower series of drive gripping rollers arranged along an arcuate path extending between first and second positions in a cushioning conversion machine improves the reliability of transferring a dunnage product and, thus, was old and well

known at the time the invention was made." As in the prior ground of rejection, the examiner concluded (answer, page 5) that it would have been obvious to duplicate the Tekavec upper and lower drive rollers and provide for an upper and a lower series of drive rollers along the Tekavec arcuate discharge path, in order to improve the reliability of the Tekavec transfer device (1) in view of Reichental's teachings and (2) since it has been held that mere duplication of essential working parts involves only routine skill in the art.

As we stated above, we know of no reason why one of ordinary skill in the art would have disposed Tekavec's coining gear assembly 54 along the arcuate path defined by the post-cutting constraining assembly 58, after the pad has been completely formed and severed into a desired length, absent the teachings in appellants' specification.

Further, as correctly pointed out by the appellants (main brief, page 11), Reichental discloses feed rollers 20, embossing rollers 22, separating rollers 25 and combining rollers 26 which are part of the conversion process. We agree

with the appellants that the applied prior art provides no suggestion to place such rollers downstream of the severing means 30. Even if a suggestion to do so did exist, we fail to understand how the rollers disclosed in Reichental would be capable of transferring a pad from a cushioning conversion machine without destroying the already formed pad.

Specifically, we do not understand and the examiner has not explained how a finished pad, such as shown in Reichental's Figure 8, could be passed through embossing rollers 22, separating rollers 25 and combining rollers 26 without destroying the finished pad and/or jamming or destroying the various pairs of rollers.

In view of the above, we will not sustain the standing § 103 rejection of claims 1, 2, 5 through 10, 12, 13, 20 and 21 based on Tekavec in view of Reichental.

SUMMARY

The rejection of claims 1 through 13, 20 and 21 under 35 U.S.C. § 103 as being unpatentable over Tekavec in view of Mistyurik is reversed.

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The rejection of claims 1, 2, 5 through 10, 12, 13, 20
and 21 under 35 U.S.C. § 103 as being unpatentable over
Tekavec in view of Reichental is reversed.

REVERSED

HARRISON E. McCANDLISH)	
Senior Administrative Patent Judge)	
)	
)	
)	BOARD OF PATENT
LAWRENCE J. STAAB)	APPEALS AND
Administrative Patent Judge)	INTERFERENCES
)	
)	
)	
JOHN F. GONZALES)	
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APPENDIX

1. A system for transferring a pad from a cushioning conversion machine, comprising:

an upper series of drive elements arranged in a generally arcuate path;

a lower series of drive elements arranged in a generally arcuate path; and

a motor for powering the rotation of the drive elements;

the upper and the lower series of drive elements being spaced to accommodate a pad and affect the transfer thereof along a path defined by the upper and lower series of drive elements.

2. The system of claim 1, wherein the drive elements are generally cylindrical rollers.

3. The system of claim 2, wherein the rollers include a plurality of gripping elements for improving the frictional engagement between the rollers and the pad.

4. The system of claim 3, wherein the plurality of gripping elements are elastomeric O-rings disposed in circumferential grooves in the rollers.

5. The system of claim 2, further including a pair of spaced guide elements for guiding the pad therebetween, the guide elements having openings therein for a portion of the rollers to protrude therethrough for contact with the pad.

6. The system of claim 1, further including an exit portion aligned with a passage in a table for the dispensing of pads from the cushioning conversion machine through the exit portion for presentation to an operator at a top surface of the table.

7. The system of claim 1, wherein the upper and lower

series of drive elements rotate in opposite directions.

8. The system of claim 1, wherein the upper and lower series of drive elements compress the pad.

9. A cushioning conversion machine located below a work table, comprising:

a stock supply assembly;

a conversion assembly for converting the stock material into a cushioning product and conveying it through a machine exit; and

a cushioning product transferring system including an upper series of rollers arranged in a path; a lower series of rollers arranged in a path; and a motor for powering the rotation of the rollers; the upper and the lower series of rollers defining a predetermined path therebetween leading from the machine exit portion to a passage in the work table with the predetermined path being of a dimension to ensure frictional contact with the cushioning product.

10. The system of claim 9, wherein the rollers include a plurality of gripping elements for improving the frictional engagement between the rollers and the cushioning product.

11. The system of claim 10, wherein the gripping elements are elastomeric O-rings disposed in a circumferential direction about the rollers.

12. The system of claim 9, including a pair of spaced guide elements for guiding the cushioning product therebetween, the guide elements having openings therein for a portion of the rollers to protrude therethrough for contact with the cushioning product.

13. The system of claim 9, wherein the upper and lower series of rollers rotate in opposite directions.

20. A cushioning conversion machine comprising:

a conversion assembly which converts a stock material into a strip of cushioning;

a severing assembly, downstream of the conversion

assembly, which severs the strip of cushioning into cushioning pads;

a pad-transferring system, downstream of the severing assembly, which transfers the cushioning pads away from the severing assembly, said system comprising:

an upper series of drive elements arranged in a generally arcuate path;

a lower series of drive elements arranged in a generally arcuate path; and

a motor for powering the rotation of the drive elements;

the upper and the lower series of drive elements being spaced to accommodate a pad and affect the transfer thereof along a path defined by the upper and lower series of drive elements.

21. In combination, a cushioning conversion machine and a table;

the cushioning conversion machine comprising a conversion assembly which converts a stock material into a strip of cushioning, and a severing assembly, downstream of the conversion assembly, which severs the strip of cushioning into cushioning pad;

the table comprising a substantially horizontal work platform having an opening therethrough;

the cushioning conversion machine being positioned below the work platform;

the cushioning conversion machine further comprising a pad-transferring system, downstream of the severing assembly, which transfers the cushioning pads away from the severing assembly, said pad-transferring system comprising:

an upper series of rollers and a lower series of rollers defining a predetermined path therebetween leading from the severing assembly to the opening in the table's work platform; and

a motor for powering the rotation of the rollers.